



PATENT

Docket No.: 57953/1151 (SAM01-02US)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	:	Muktar A. Mahajan et al.	)	Examiner:
			)	Guy L. Guidry
Serial No.	:	10/645,250	)	
			)	Art Unit:
Cnfrm. No.	:	7913	)	1636
			)	
Filed	:	August 20, 2003	)	
			)	
For	:	NIF-1 IS A NOVEL CO-TRANSDUCER	)	
		THAT INTERACTS WITH AND	)	
		REGULATES THE ACTIVITY OF THE	)	
		NUCLEAR HORMONE RECEPTOR CO-	)	
		ACTIVATOR, NRC	)	

DECLARATION OF MUKTAR A. MAHAJAN AND HERBERT H. SAMUELS  
UNDER 37 CFR § 1.131

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

We, MUKTAR A. MAHAJAN AND HERBERT H. SAMUELS, pursuant to  
37 CFR § 1.131 declare that:

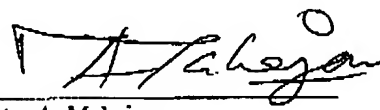
1. We are joint inventors of the above-identified patent application.
2. It is our understanding that the U.S. Patent and Trademark Office has rejected claims of our above-identified application over U.S. Patent 6,783,969 to Tang et al. (filed March 5, 2001).
3. We are providing this declaration to demonstrate that the claimed subject matter of our above patent application was invented by us, in the United States, before March 5, 2001.
4. Attached hereto as Exhibits 1, 2, and 3 are copies of NIF-1 sequences we generated. The data was documented before March 5, 2001. Exhibit 1 shows a nucleic acid molecule having a nucleotide sequence of SEQ ID NO: 1. Page 1 shows 1-3762 of the sequence (starting from G, the second letter displayed) and page 2 shows from 571-4430 of the sequence. The exact dates the SEQ ID NO: 1 data was documented are redacted on

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- 2 -

Exhibit 2 (pages 1 and 2). Exhibit 3 shows the complete amino acid sequence designated as SEQ ID NO: 2 (from 1-1443) and the exact dates the data was documented are redacted.

5. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 7/10/07  
Muktar A. MahajanDate: 7/10/07  
Herbert H. Samuels

ATG	GC	GG	CC	GA	CCA	CAC	GGT	ACC	TGA	TCC	TAC	AGG	GCC	CAG	ATG	ATG	GAG	CCC	CCA	TGA	CAT	CAC	CRA	TGT	CCA	GTT	CCA	CCT	TGG	CCC	ACA	GCC	TAG	CAG	CCA	TTG	AGG	6324	
CCC	TGG	CAG	ATG	GCC	CCA	CAT	CCA	CAT	GCC	TGG	AGG	CAC	AGG	GTG	GGC	CCA	GCT	CCC	CGG	TGC	TGC	AGC	TGC	CCG	GTG	CCG	CAG	CCT	CCG	GTG	CCG	ARG	AGC	CGG	ACC	TGC	AGA	GCC	7900
TGG	AGG	CCA	TGA	TGG	AGG	TGG	TGG	TGC	AGC	TGA	ATG	ACT	ACC	GGG	CCA	CAC	TGC	GCC	ACA	TGC	GCC	ACA	TGC	GGG	ACC	ACT	TCC	ACT	TCC	GGC	ACC	ATG	ATG	ATG	ATG	ATG	ATG	9122	
CAG	TAG	CAG	CAG	CCG	CAG	CAG	CTG	GTA	AAA	AAA	AGG	GAC	GTG	TAC	GGG	AGT	GGG	AGG	CCA	CCT	CCA	AGA	GCC	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	10226	
TAG	ACG	CTG	GAG	CCA	TTG	ATG	ACC	TGG	AGG	AGG	ATA	GGG	ACT	ATA	ATC	CAG	CTG	AGG	ATG	AGC	CCC	GAG	GCC	GGC	AGC	TTG	GGC	TCC	AGC	GCC	CCA	CCC	CCA	GTA	CCC	CAG	GGC	11418	
CCC	GAA	GGA	GAC	CTG	GCC	GGC	CCC	TGC	AGC	TGC	GGG	AGC	TCT	CAG	ACC	TCC	CAG	ACC	TCC	CAG	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	12554	
AGC	CAC	AGG	ATC	CCG	AGG	ATC	CCG	AGG	ACC	TGG	TGG	CCA	TGG	GCA	AGG	CCA	CCC	CTG	TGG	AGG	CTG	GTG	TGA	GCC	AGT	CAG	ATG	CAG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	AGG	13658	
CAG	CCC	CCT	CCT	GCC	CGG	ATG	ACA	CTC	TGC	CCC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	GGC	14822
TTT	TGA	GGC	CCT	TCC	TGT	GGC	GCA	TCT	GTG	GTT	CTC	GCT	TTG	TGT	CCC	ACG	AGG	ACC	TGC	GCT	TCC	ACG	TCA	ACT	CCC	ATG	AGG	CTG	GGC	ATC	CCC	AGC	TCT	TCA	AGT	GCC	TGC	15986	
AGT	GCA	GCT	ATC	ATC	CCC	GCT	GGT	CCT	CGC	TCA	AGG	AGC	ACA	TGT	TCA	ACC	ACG	TGG	GCA	AGC	CGT	ACA	AGT	GTG	ACG	AGT	GCA	GCT	ACA	CCA	GTG	TCT	TCA	AGT	GCC	TGC	17118		
ACG	TCA	TTG	GGC	ACG	CCG	CTG	TGC	ACA	GCC	GGG	ACC	GGG	AGA	AGG	GCC	ACA	TGT	GTG	ACA	AGT	GTG	GAA	AGT	CCT	TTA	AGA	AGC	GCT	ACA	AAA	TGC	ACC	TGC	TCA	AGG	AGG	18224		
AAA	GAC	TCA	CGC	AGC	ACA	TGA	AGA	CGC	ACA	GCA	CTG	AGA	AGC	CCC	ACA	TGT	GTG	ACA	AGT	GTG	GAA	AGT	CCT	TTA	AGA	AGC	GCT	ACA	AAA	TGC	ACC	TGC	TCA	AGG	AGG	AGG	19328		
TCC	AGG	CTG	TTG	CCA	ACC	GCA	GGT	TCA	AGT	GTG	AGT	TCT	GTG	AGT	TTG	TTT	GTG	AGA	ACA	AGG	CAC	TGC	TGA	ACC	AGT	TGT	CCC	ACG	TCA	GTG	ACA	AGC	AGC	CCT	TCA	AGG	20432		
GCA	GCT	TTT	GTG	CCT	ACC	GCA	CCT	TCC	GAG	AGG	ACT	TCT	TGC	TGT	CCC	ATG	TGG	CCA	GCA	GCT	TGG	AGG	AGT	GGG	GCA	AGC	AGT	GGG	GCA	AGC	CTG	AGG	AGC	AGC	CCT	TCA	AGG	21536	
ACA	AGA	AGA	ACC	TGC	GCC	TGC	ACG	TAC	GGT	GCC	GAC	ACG	ACA	GCA	GCT	TGG	AGG	ATG	GGG	GCA	AGC	CTG	AGG	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	AGC	22640	
AGC	AGA	TTG	AGG	AGC	TGA	AGC	AGC	ACA	GTG	CGG	CCC	CTG	GAC	CAC	CTC	CCA	GTT	CCC	CAG	GAC	CTC	AGA	TAC	CCC	CAG	AGG	CGA	CAT	CTT	TCC	AGT								





<p>RTG GCG GGG CCG AGA CCA CAC CAC GGT ACC TGA TCC TAC AGG GCC CAG ATG ATG GAG CCC CCA TGA CAT CAC CAA TGT CCA GTT CCA CCT TGG CCC ACA GGC TAG CAG CCA TTG AGG</p> <p>CCC TGG CAG ATG GCC CCA CAT CCA CAT CCA CAT GGT GGC CCA GCT CCC CCG GTG CCG AGG ACC TGC CCG AGG ACC TGC AGA GGC</p> <p>TGG AGG CCA TGA TGG AGG TGG TGG TGC AGC AGT TCA AAT GCA AGA TGT GGT ACC GGA GCA GCA CCA AGG CCA CAC TGC GGC AAC GGC ACT TCC CTC</p> <p>CAG TAG CAG CAG CCG CAG CAG CTG GTA AAA AAG AAG GAC GTC TAC GGA AGT GGA GCA CCT CCA CCA AGA GGC AGG CCA AGG AGG GAC CAG AGG AGG ATG ACA TTG</p> <p>TAG ACG CAG CTG GAG CCA TTG ATG ACC TGG AGG ATA GCG ACT ATA ATC CAG CTG AGG ATG AGC CCC GAG GGC AGC TTC GGC TCC AGC GCC CCA CCC CCA GTA CCC CCA GGC</p> <p>CCC GAR GGA GAC CTG GCC GGC CCC GGA AGC TGC CCC GGC CCT CAG GCC CAG GAC</p> <p>AGC CAC AGG ATC CCG AGG CTC CCA GCT CCT CAG GCC CAG GAC</p> <p>CAG CCC CCT CCT GCG RTG AGC ATG ACG CTC TGC CCC GGC</p> <p>TTTT TGA GGC CCT TCC TGT GCC GCA TCT GTG GTT CTC GCT TTG</p> <p>AGT GCA GCT ATC GTT CCC GGC GCT GGT CCT CCG TCA AGG AGC</p> <p>AGC TCA TTC GGC ACG CCG CTG TGC ACA GGC GCG ACC GGA AGA</p> <p>AAAA GAC TCA CCG AGC ACA TGA AGA CCG ACA GCG CCA CTG AGA AGC</p> <p>TCC AGG CTG TTG CCA ACC GCA GGT TCA AGT GTG AGT TCT GTG</p> <p>GGCA GCT TTT GTC CCT ACC GCA CCT TCC GAG AGG ACT TCT TGG</p> <p>ACCA AGA AGA ACC TGC GCC TGC ACG TAC GGT GCC GAC ACG CAA</p> <p>AGC AGA TTG AGG AGC TGA AGC AGC AGC ACA GTG CCG CCC CTG</p> <p>CCT CAT TGC TCT GTT CTG ACA CCC TGG GCG GCG CCA CCA TCA</p> <p>GTG CTC AGC GGG AAC TGG GGG GCA CAG CCC TGC AGG TGG CTG</p> <p>CCAC AGG TGG TCA CCC TCC ACG TGG CAG AGC CAG GGG GCG GTG</p> <p>CTG GCT ACA GTG TCA TCA CAG CAC CCC CTA TGG AGG AGG GAA</p> <p>CCC TAA AAG AAG CTG GCA CCC ACT ACA TCA TGG CTA CTG ATG</p> <p>CTG GTG CCA AAT GGC CCC TGC TGC AGT GTG GGG GAC TGC CCA</p> <p>CTC CTG CCA CCA CCA AAG CCC TGG GCG TGG CAG TGC CCC CGT</p> <p>AGG CTG AGA TGG AGA GTC ACA AGC GGG CCC ACG CTG GGC CTG</p> <p>ACT CAA GCC TAC GGC CCC ACC AGT GTA GCC AGT GCA GCT TTG</p> <p>TCT GCG GGC AGC GTT TCA ACC GTA ACG GGC ACC TCA AGT TCG</p> <p>CAC CCC AGA CCA TCA TCC TGA ACA GTG ATG ACG AAA CAC TGG</p> <p>AGG AAC ACA TCA TCG TTG CCC AGG AAC AGA CAG TGA CCA ATG</p> <p>ACA ACC AGG TGC AGT ATA TCA TCT CCC AGG ATG GTG TCC AGG</p> <p>ACA TCC AGT ATG AAC AAG GAG CCC CGT TCC TTC AGG AGT CCG</p> <p>CAG CTG TCA CAG CAG TGG CTG ATG CTG CCA TGG CCC AAG CCC</p> <p>AGC TCA TCA CCC TGG CCG ATG ACT GAG CCC CCA GGG CCC AAC</p> <p>GAT CTC CAG ATA CTG GAT AGC CAG CAT CCT CTC ATT CCC AGG</p> <p>GCA GGC AGG CTT TGG GAG AGA AAT TTA TTT TTT TTT TTT TTT</p>		<p>assamble h-CIPmRNA Info</p> <p>General:</p> <p>Kind: MacVector™ 6.5.3 Document</p> <p>Size: 32 KB on disk (27,974 bytes)</p> <p>Where: Macintosh HD:Muktar:IMAHAN-TH409:CIP/NIF:</p> <p>Created: REDACTED</p> <p>Modified: REDACTED</p> <p>Stationery Pad</p> <p>Locked</p> <p>Name &amp; Extension:</p> <p>assamble h-CIPmRNA</p> <p>Open with:</p> <p>MacVector™ 6.5.3 (default)</p> <p>Use this application to open all documents like this.</p> <p>Change All...</p> <p>Preview:</p> <p>Ownership &amp; Permissions:</p> <p>Comments:</p>
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Translation of assemble h-CIPmRNA

1/14  
228  
342  
456  
570  
684  
798  
912  
1026  
1140  
1254  
1368  
1482

MEE NEV ESS SDA APG PGR PEE PSE SQL QVG TSE AVS ADS SDA AAA PQQ AEA DDS GVG QSS DRG SRS QEE VSE SSS SAD PLP NSY LPD SSS VSH GPV AGV TGG PPA LVH SSA LPD  
PNM LVS DCT ASS SDA IDK IIE STI QPD LIQ NC1 TVT SAE DGG AET TRY LIL QGP DGG APM TSP MSS STL AHS LAA IEA LAD GPT STS TCL EQG GGP SSP VQL PPA SGA EEP  
DLQ SLE AMM EVV VVQ QFK CKM CQV RSS TKA TLL RHM RER HFR PVA AAA GKK GRL AKH STS TKS QEE EGP EEE DDD DIV DRG AID DLE EDS DYN PAE DEP RGR QLR LQR PTP  
STP APR ARP GRP AKL PAL EIS DLP DGV EGE PLV SSQ SQG SPP EPQ DPE APS SSG PGH LVA MGK VSR TPV SVY RKD VIR HAA VHS RDR KKR PDP TPK LSS FPC PVC GRV  
SPK PLL RPF LCR ICG SAF LSH EDL RFH VNS HER GDP QLF KCL QCS VRS RAR SSL KEH MFN HVG SKP YKC DEC SYT SVY RKD VIR HAA VHS RDR KKR PDP TPK LSS FPC PVC GRV  
YPM QKR LTQ HMK THS TEK PHM CDK CGK SFK KRV TFK MHL LTH IQR VAN RAR KCE FCE FVC EDK KAL LNH QLS HVS DKP FVC SFC PYR TFR EDF LLS HVA VKH TGA KPF ACE VCH  
FST RHK KNL RLH VRC RAR SSF EEW GRR HPE EPP SRR RPF FSL QQI EEL KQK HSR APG PPP SSP GPP EIP PER TTF QSS EAP SLL CSD TLG GAT IIV QQG AEE STA MAT QTA LQL  
LLN MSA QRE LGG TAL QVR VVK SED VEA GLA SPG GQP SPE GAT PQV VTL HVA EPG GGR AAE SQL GPP DLP QIT LAP GPF GGT GYS VIT APP MEE GTS APG TPY SEE PAG ERA QAV  
VVS DTL KEA GTH YIM ATD GTQ LHM IEL TAD OSI SFP SPD ALA SGR KNP LLQ CGG LPA DGP EPP SRA KTH CVG DSQ SSA SSP PAT SKA LGL AVP PSP PSA ATA ASK KFS CKI CRE  
AFP GRR EME SHK RAR AGP GAF KCP DCP FSA RQH PEV RAR MAQ HSS LAR HQC SQC SFA SKN KKD LAR HML THT KEK PFA CHL CGQ AFN ANG HLK FHI QAL HSP DGR KSG TPT ARA  
PTQ TPT QT1 ILN SDD ETL ATL HTR LQS SHG VLG PER LQK ALS QEH IIV AQE QTV TNQ EEA RYI QE1 TTA DGG TVQ HLV TSD NQV QV1 ISQ DGV QHL LPQ EVV VVP EGH HIQ VQE  
QQ1 TH1 QVE QGR PFL QES QIQ VVP VSP QQQ LVT QAR LEA RAR SAV TRV ADA RAR QAR QLF GTD ETV PEH IQQ LQH QGI EYD VIT LAD D\*P PRA QHR SHI CQK LSW G\*G ATR THL  
PLH LOS PDT G\*P ASS HSQ GRR PVL LGL GRR MGP SQD MLO APA CRQ ALG EKX IFV WVD PLA CQS Q\*P DRS PVL NSL

assemble h-CIPmRNA Info

General:



assemble h-CIPmRNA

Kind: MacVector™ 6.5.3 Document

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